UML Document

For

Digitalized System to Book an Ambulance

Version 1.0 approved

Prepared By Debasrito Lahiri (1729122)

21/10/2019

REVISION HISTORY

DATE	VERSION	DESCRIPTION	AUTHOR
21/10/2019	1.0	First Edition	Debasrito Lahiri

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UML Document

1. Introduction

1.1 Purpose

This document provides a comprehensive overview of the system components and their behaviors, using a number of different UML diagrams to depict different aspects of the system.

1.2 Scope

The various UML designs shown in this document affect the functioning of the whole system. As such this document can be considered as an overview of the structure of the whole system and its behavior.

1.3 Definitions, Acronyms, and Abbreviations

Database: Google firebase service

Maps: Google maps platform

Driver details: Information pertaining to the driver

Patient details: Information pertaining to the patient

Location info: Location latitude and longitude

1.4 References

[1]. Firebase, Wikipedia, 09/08/2017, URL: https://en.wikipedia.org/wiki/Firebase

[2]. Google APIs, Wikipedia, 31/08/19, URL: https://en.wikipedia.org/wiki/Google_APIs

2. Goals and Constraints

Our system is dependent on real-time databases. Constructing this system on other databases may require change in the structure of the system. Also, the system is dependent on google maps platform. Non-availability of google maps app and/or browser will impact the dataflow, especially for the Driver module.

3. Activity diagram
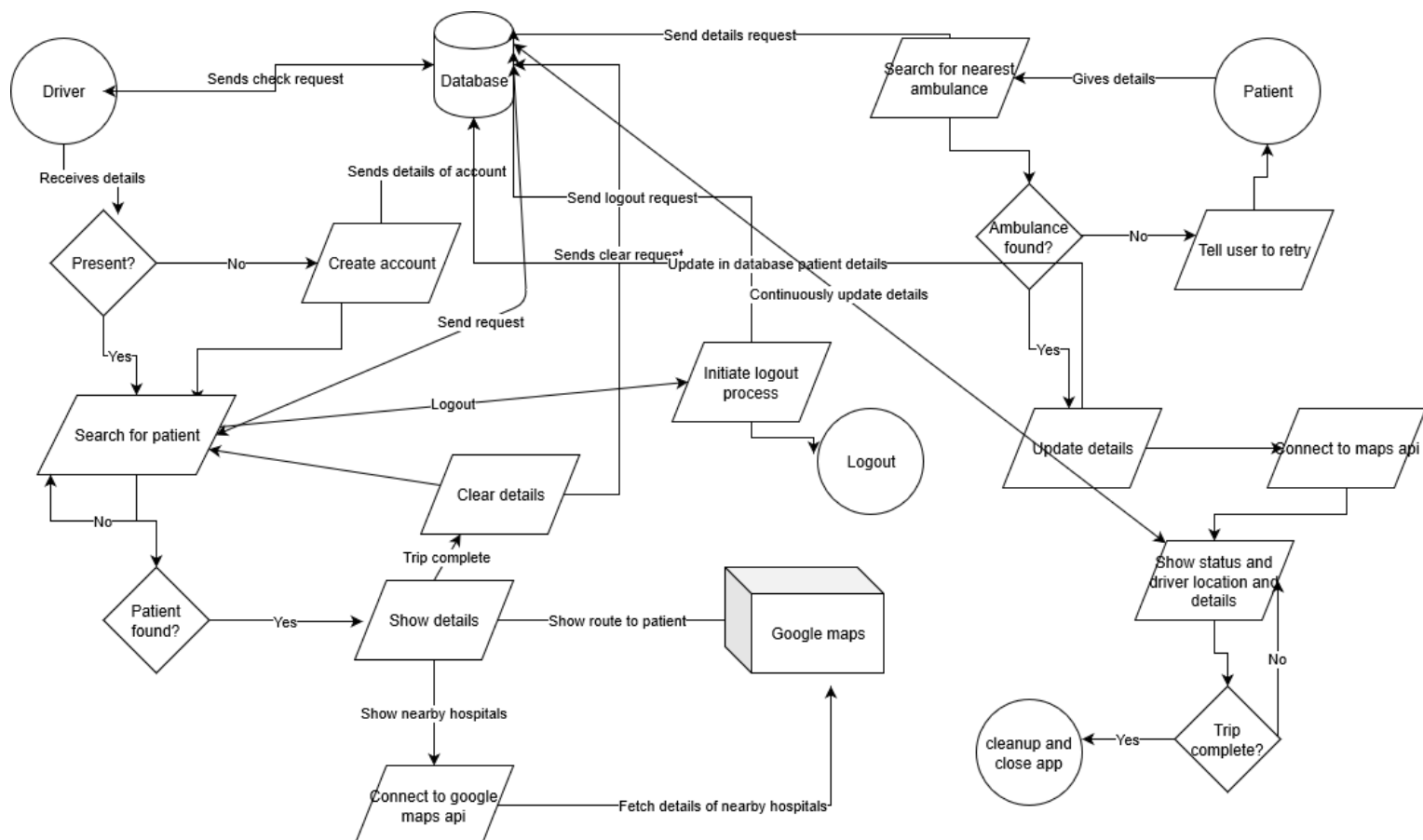
4. Use case diagram

5. Sequence diagram

6. Class diagram

| androidx | LocationListener | android | java | util | com.google.android | com.google.maps | com.google.firebase |

patientapp:MainActivity

+nameget
+mobileget
+name
+mobile
+cartype
+book
+finderintent
+locationManager
+loc
+typeselect

+onCreate()
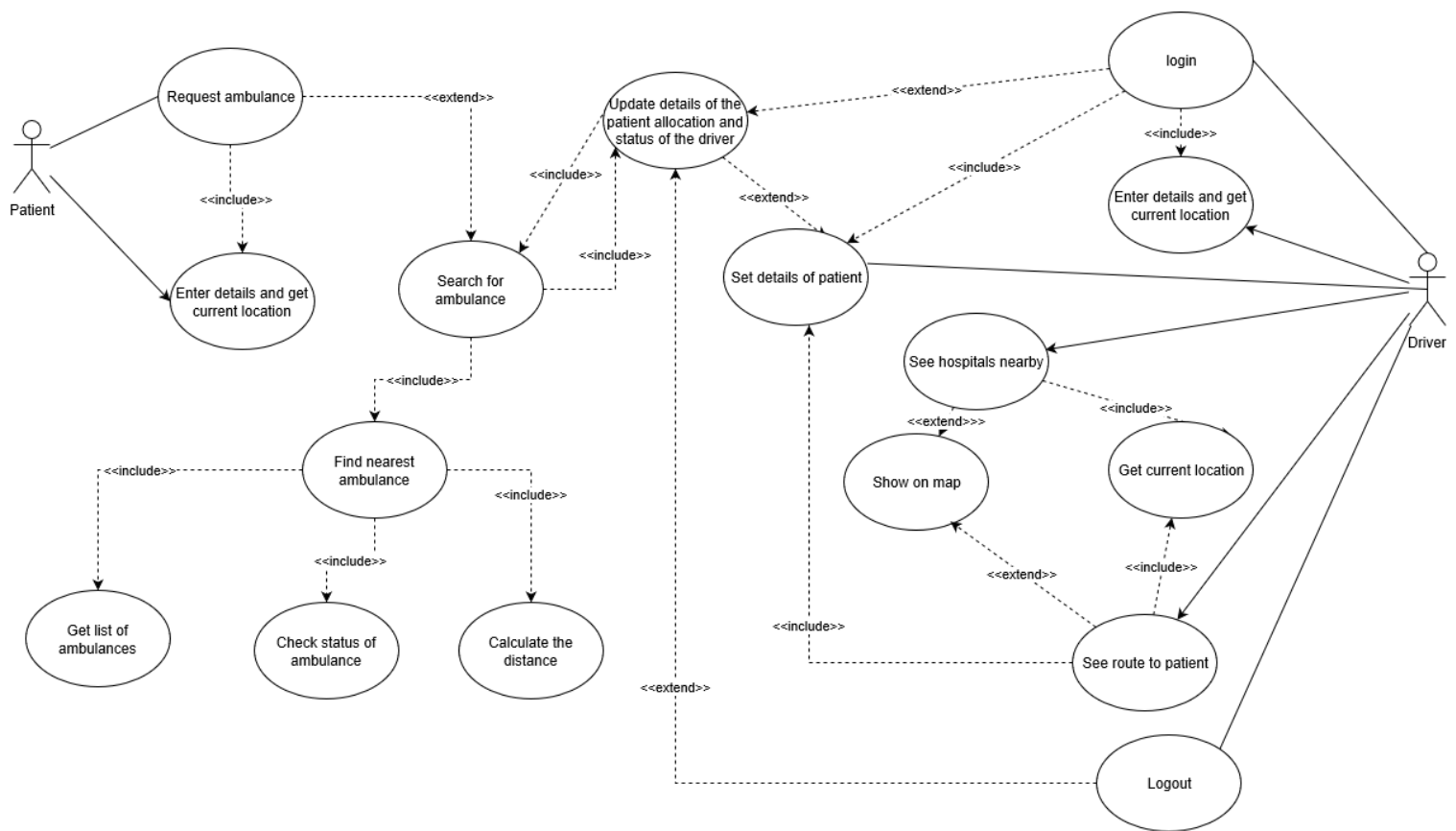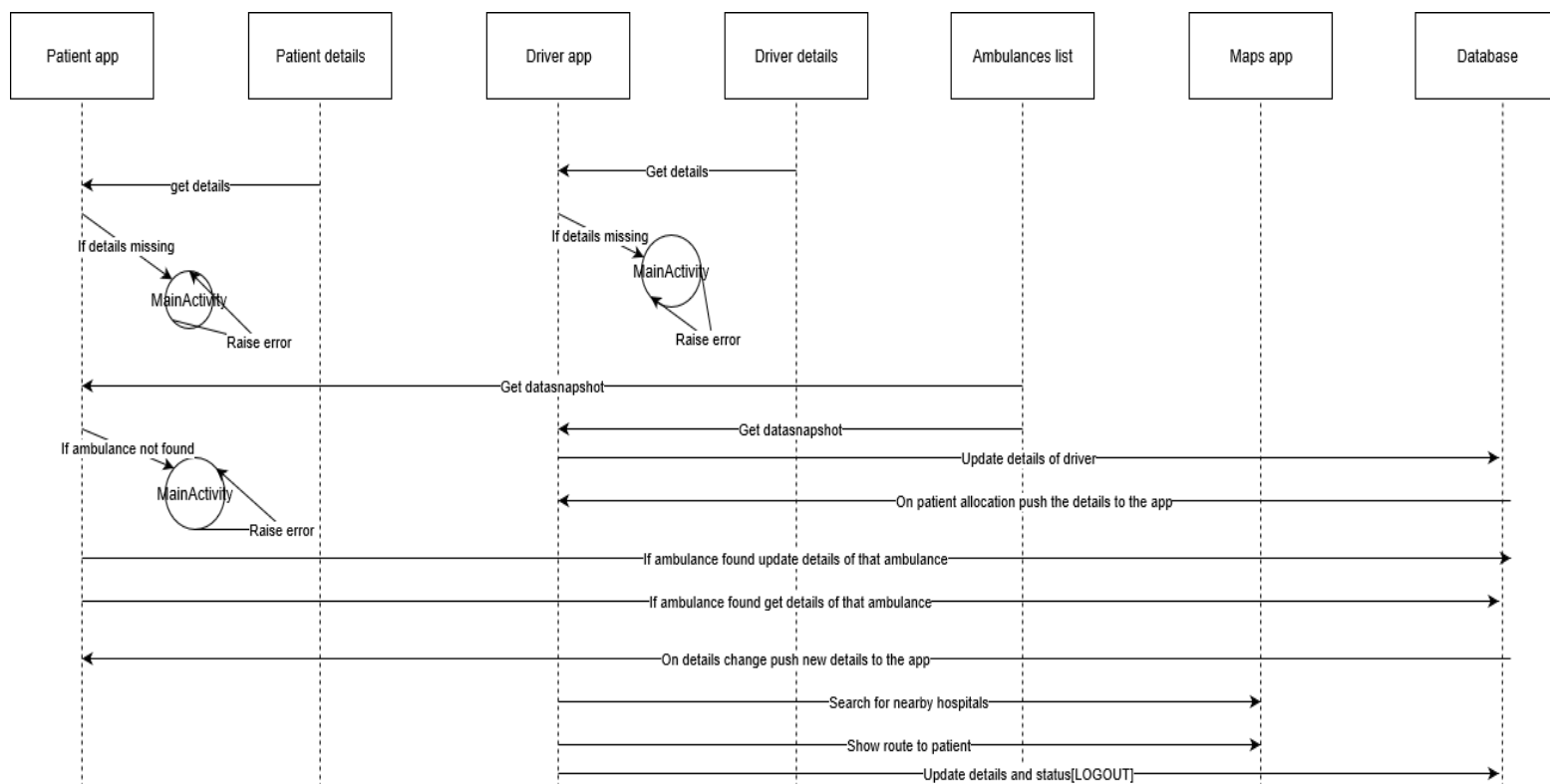+onLocationChanged()
+onStatusChanged
+onProviderDisabled()
+onProviderEnabled()
+isNetworkAvailable()

patientapp:finder

+i
+detailsintent
+patient
+pmobile
+loc
+dloc
+dname
+dmobile
+did
+cardet
+cartype
+dist
+distance
+status
+active
+notavail
+dlat
+dlong

+onCreate()
+onDataChanged()
+onCancelled

patientapp:details

+caseid
+name
+mobile
+car
+i
+patient
+pmobile
+mapView
+gmap
+MAP_VIEW_BUNDLE_KEY
+loc
+dloc
+dname
+dmobile
+did
+cardet
+cartype
+dist
+distance
+dmark
+dmark2
+pmark
+pmark2
+status
+active
+notavail
+dlat
+dlong
+referencemap

+onCreate()
+onSaveInstanceState()
+onResume()
+onStart()
+onStop()
+onStop()
+onPause()
+onDestroy()
+onLowMemory()
+onmapReady()
+onDataChange()
+onCancelled()

driverapp:MainActivity

+nameget
+mobileget
+carget
+dname
+dmobile
+car
+id
+cartype
+check
+checkintent
+locationManager
+loc
+status
+active
+found
+typeselect

+onCreate()
+onDataChanged()
+onCancelled()
+onLocationChanged()
+onStatusChanged
+onProviderDisabled()
+onProviderEnabled()
+isNetworkAvailable()

driverapp:details

+drivername
+drivermobile
+drivercar
+driverstatus
+driveractive
+driverlatitude
+driverlongitude
+patientlongitude
+patientlatitude
+patientname
+patientmobile
+cartype

+details()

driverapp:status

+i
+namevalue
+mobilevalue
+dname
+dmobile
+car
+id
+pname
+pmobile
+cartype
+plat
+plong
+router
+done
+logout
+hospital
+status
+active
+locationManager
+loc

+onCreate()
+onDataChanged()
+onCancelled()
+onLocationChanged()
+onStatusChanged
+onProviderDisabled()
+onProviderEnabled()
+isNetworkAvailable()